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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,469	03/26/2004	Joan Vermeersch	227964	3990

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EXAMINER

LEE, SIN J

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,469

Applicant(s)

VERMEERSCH ET AL.

Examiner

Sin J. Lee

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-7, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren et al (EP 0 950 516 A1).

Verschueren teaches ([0026] a heat mode imaging element (for making a lithographic printing plate) having on a lithographic *base with a hydrophilic surface* a first layer including an *aqueous alkaline solution-soluble polymer* and a top layer, which is IR sensitive and *unpenetrable for an alkaline developer* and which also contains a compound that increases the dynamic friction coefficient of the top layer to 0.40-0.80 (it is to be noted that present specification, pg.8 states that the present coating can be

composed of two or more separately coated layers). As one of the examples for the latter compound, Verschueren teaches ([0029]) *water insoluble* inorganic compound having particle size of 0.3-50 um and having a *three-dimensional structure* with *siloxane bonds* extending three-dimensionally and with silicon atoms bonded to one organic group such as *methyl group*. Since the range of 0.3-50 um overlaps with present range of 0.6-15 um of claim 1 (and with present range of 1-15 um of claim 2 and present range of larger than 0.6 um of claim 11), the prior art's teaching would render present range *prima facie* obvious. In the case "where the [claimed] ranges overlap or lie inside ranges disclosed by the prior art," a *prima facie* case of obviousness would exist which may be overcome by a showing of unexpected results, In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Therefore, Verschueren render obvious present spacer particles (which are crosslinked poly alkylsiloxane). Since Verschueren's top layer is unpenetrable for an alkaline developer, it is the Examiner's position that it is impliedly taught that the top layer contains presently claimed developer resistance means. Verschueren's top layer comprises an IR dye or pigment (see [0031]). Therefore, the prior art teaches present infrared light absorbing agent. In [0038], Verschueren teaches a novolac polymer as one of a few examples for the alkali soluble, hydrophobic binders used in Verschueren's first layer. Therefore, the prior art teaches present oleophilic resin soluble in an aqueous alkaline developer. Therefore, the prior art's teaching would render obvious present coating of claim 1 and thus present inventions of claims 1-3, 5, 10, and 11 (it is the Examiner's position that Verschueren's *water insoluble* inorganic compound having a three-dimensional structure with *siloxane bonds*

extending three-dimensionally and with silicon atoms bonded to one organic group such as *methyl group* would inherently be capable of improving the scuff-mark resistance of the coating as presently recited in claims 10 and 11).

With respect to present claim 4, Verschueren teaches ([0034] and [0041]) that the total amount of his top layer ranges from 0.05-10 g/m² and that the total amount of his first layer ranges from 0.1 to 10 g/m², thus giving 0.15-20 g/m² in total. Since the latter range overlaps with present range of 0.6-2.8 g/m², the prior art's teaching would render present range *prima facie* obvious. In re Wertheim, supra. Therefore, the prior art's teaching renders obvious present invention of claim 4.

With respect to present claim 6, Verschueren teaches the amount of his compound that increases the dynamic friction coefficient of the top layer to be 20-400 mg/m² preferably (see [0029]). Since this range overlaps with present range of 5-200 mg/m², the prior art's teaching would render present range *prima facie* obvious. In re Wertheim, supra. Therefore, the prior art's teaching renders obvious present invention of claim 6.

With respect to present claim 7, since Verschueren's compound that increases the dynamic friction coefficient of the top layer contains a *three-dimensional structure* with *siloxane bonds* extending three-dimensionally and with silicon atoms bonded to one organic group such as *methyl group* (i.e., the compound contains crosslinked polymethylsiloxane units), it is the Examiner's position that Verschueren's compound would inherently act as present developer resistance means. Therefore, Verschueren's teaching renders obvious present invention of claim 7.

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren et al (EP 0 950 516 A1) in view of applicants' admitted prior art (pg.4, lines 31-33).

Applicants state (pg.4, lines 31-33) that it is a typical industrial process that after coating and drying, the lithographic thermal printing plate materials are stacked with or without an interleave in between the plates and that those plates are handled in packaging equipment for cutting and packaging. Therefore, it is the Examiner's position that Verschueren in view of applicants' admitted prior art renders obvious present inventions of claims 8 and 9.

Response to Arguments

5. Applicants argue that the present invention is directed toward solving a problem distinct from that of Verschueren. However, even if the motivation of using the compound were different between Verschueren and present invention, it is not required for a finding of obviousness that the motivation of one of ordinary skill in the art be the same as applicants' motivation. In re Kemps, 97 F.2d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir.1996); In re Dillon, 919 F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991).

Applicants argue that the unexpected advantages are obtained when using the spacer particles of the present invention as demonstrated in Comparative Examples 1-12. The data presented in Comparative Examples 1-12 were carefully considered but were found to be unpersuasive to show unexpected superior results of using the present spacer particles. In Comparative Example 2, applicants use CP-01 (which is a

cross-linked silicone particle with an average particle size of *0.5 um*) in the amount of 1.73 g and in the concentration of 40 mg/m². In Examples 1-9, applicants use P-01 (a cross-linked silicone particle with an average particle size of 2 um), P-02 (a cross-linked silicone particle with an average particle diameter of 3 um), P-03 (a cross-linked silicon particle with an average particle diameter of 4 um), P-04 (cross-linked silicone particle with an average particle size of 4.5 um), and P-05 (cross-linked silicone particle with an average particle size of 6 um, in the same amount (1.73 g) and in the same concentration (40 mg/m²) as that of Comparative Example 2. However, applicants did not show the criticality of *the lower side* of the present range of *0.6-15 um*. For example, *there is no comparison between the CP-01 having the average particle size of 0.5 um and a cross-linked silicone particle with an average particle size of 0.6 um*. To establish unexpected results over a claimed range, applicants should compare a sufficient number of tests both inside and outside the claimed range to show the criticality of the claimed range. In re Hill, 284 F.2d 955, 128 USPQ 197 (CCPA 1960). In other words, in order for the unexpected results to be commensurate in scope with claimed invention, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. See MPEP 716.02(d), citing In re Clemens, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980). Also, the Examiner notes that Example 9 (which uses P-05 having particle size of 6 um) does not show unexpected *superior* results when compared to Comparative Example 2 because the rating for the scuff-mark resistance is “3” for Example 9 and the rating for Comparative Example 2 is 4.

Applicants argue that there is no motivation in Verschueren to use the polysiloxane compound as the compound that increases the dynamic friction coefficient of the top layer to 0.40-0.80 because Verschueren's Example 6 (see [0098]), which uses TOSPEAEL 105 (a cross-linked silicone particle with an average particle diameter of 0.5 μm), shows the worst performance in improving the dynamic friction coefficient. However, there is not too much difference between the dynamic friction coefficients of Verschueren's Example 6 and his other Examples (especially, Examples 4-5), and the result for Example 6 in terms of transport of plate (see [0099]) is still "good" (it does not say "poor"). Therefore, the Examiner disagrees with applicants' contention that one would be led away from the selection of a polysiloxane in Verschueren.

For the reasons set forth above, present rejections still stand.

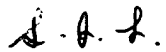
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

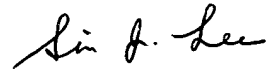
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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee

April 18, 2005



Sin J. Lee

Patent Examiner

Technology Center 1700